



PTO/SB/08A (08-03)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	10/823,400
Filing Date	April 13, 2004
First Named Inventor	Ralph Bauer
Art Unit	1714
Examiner Name	Tae H. Yoon
Attorney Docket Number	1035-A4363

Sheet 1 of 4

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
✓	AA	US- 2004/265219 A1	12/30/2005	Bauer et al.	
✓	AB	US- 2006/104895 A1	05/18/2006	Bauer et al.	
	AC	US- 2006/148955 A1	07/06/2006	Guiselin et al.	
	AD	US- 4,632,364	12/30/1986	Smith	
	AE	US- 5,155,085	10/13/1992	Hamano et al.	
	AF	US- 5,302,368	04/12/1994	Harato et al.	
	AG	US- 5,508,016	04/16/1996	Yamanishi et al.	
	AH	US- 6,747,087 B2	06/08/2004	Custodero et al.	
	AI	US- 6,653,387 B2	11/25/2003	Causa et al.	
	AJ	US- 3,842,111	10/15/1974	Meyer-Simon et al.	
	AK	US- 3,873,489	03/25/1975	Thurn et al.	
	AL	US- 3,978,103	08/31/1976	Meyer-Simon et al.	
	AM	US- 3,997,581	12/14/1976	Pietka et al.	
	AN	US- 5,580,914	12/03/1996	Falla et al.	
	AO	US- 5,583,245	12/10/1996	Parker et al.	
	AP	US- 5,663,396	09/02/1997	Musieve et al.	
	AQ	US- 5,684,171	11/04/1997	Wideman et al.	
	AR	US- 5,684,172	11/04/1997	Wideman et al.	
✓	AS	US- 4,386,185	05/31/1983	Macdonell et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
✓	AT	EP 0 501 227 B1	12/06/1995	Michelin & CIE	English Abstract	
	AU	WO 2003/089508 A1	10/30/2003	SG Ceramics & Plastics		
	AV	WO 2004/016630 A1	02/26/2004	Centre National	English Abstract	
	AW	WO 2004/090023 A1	10/21/2004	Michelin	English Abstract	
	AX	WO 2006/002993 A1	01/12/2006	Michelin	English Abstract	
✓	AY	WO 2007/056404 A1	05/18/2007	SG Ceramics & Plastics		

Examiner
Signature

/Tae Yoon/

Date
Considered

08/13/2007

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STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 4**Complete if Known**

Application Number	10/823,400
Filing Date	April 13, 2004
First Named Inventor	Ralph Bauer
Art Unit	1714
Examiner Name	Tae H. Yoon
Attorney Docket Number	1035-A4363

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		Number-Kind Code ² (if known)			
	BA	US- 4,002,594	01/11/1977	Fetterman	
	BB	US- 5,580,919	12/03/1996	Agostini et al.	
	BC	US- 2004/0030017 A1	02/12/2004	Simonot et al.	
	BD	US- 6,858,665 B2	02/22/2005	Larson	
	BE	US- 5,696,197	12/09/1997	Smith et al.	
	BF	US- 3,321,272	05/23/1967	Kerr	
	BG	US- 3,950,180	04/13/1976	Kato	
	BH	US- 5,286,290	02/15/1994	Risley	
	BI	US- 5,318,628	06/07/1994	Matijevic et al.	
	BJ	US- 5,321,055	06/14/1994	Slocum	
	BK	US- 5,344,489	09/06/1994	Matijevic et al.	
	BL	US- 6,017,632	01/25/2000	Pinnavaia et al.	
	BM	US- 6,156,835	12/05/2000	Anderson et al.	
	BN	US- 6,486,254 B1	11/26/2002	Barbee et al.	
	BO	US- 6,646,026 B2	11/11/2003	Fan et al.	
	BP	US- 6,648,959 B1	11/18/2003	Fischer et al.	
	BQ	US- 2004/0120904 A1	06/24/2004	Lye et al.	
	BR	US- 6,872,444 B2	03/29/2005	McDonald et al.	
	BS	US- 6,924,011 B2	08/02/2005	Van Aert et al.	

FOREIGN PATENT DOCUMENTS

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		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	BT	WO 98/14426	04/09/1998	Bionumerik Pharmaceuticals Inc.		
	BU	WO 2005/100491 A2	10/27/2005	Saint-Gobain Ceramics		
	BV	GB 1189304	04/22/1970	British Petroleum Co.		
	BW	EP 0 038 620 A2	10/28/1981	ICI PLC		
	BX	WO 2006/60206 A1	06/08/2006	Saint-Gobain Ceramics		
	BY	EP 0 697 432 B1	10/15/2003	Bridgestone Corp.		

Examiner Signature	/Tae Yoon/	Date Considered	08/13/2007
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First Named Inventor	Ralph Bauer
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Sheet **3** of **4****U. S. PATENT DOCUMENTS**

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		Number-Kind Code ² (if known)			
3	CA	US- 2007/104952 A1	05/10/2007	Bianchi et al.	
	CB	US- 6,417,286 B1	07/09/2002	Agostini et al.	
	CC	US- 6,534,584 B2	03/18/2003	Wideman et al.	
	CD	US- 6,635,700 B2	10/21/2003	Cruse et al.	
	CE	US- 4,377,418	03/22/1983	Birchall et al.	
	CF	US- 4,539,365	09/03/1985	Rhee	
	CG	US- 4,623,738	11/18/1986	Sugerman et al.	
	CH	US- 4,558,102	12/10/1985	Miyata	
	CI	US- 5,723,529	03/03/1998	Bernard et al.	
	CJ	US-			
	CK	US-			
	CL	US-			
	CM	US-			
	CN	US-			
	CO	US-			
	CP	US-			
	CQ	US-			
	CR	US-			
	CS	US-			

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		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
3	CT	WO 2006/60468 A3	06/08/2006	Saint-Gobain Ceramics		
	CU	EP 1 112 961 B1	09/15/2004	Sumitomo Chemical Co.		
	CV	WO 2004/056915 A1	07/08/2004		English Abstract	
	CW	EP 1 000 965 B1	10/08/2003	Bridgestone Corp.		
	CX	EP 0 807 603 B1	12/17/2003	Sumitomo Chemical Co.		
	CY					

Examiner Signature	/TY/ /Tae Yoon/	Date Considered	08/13/2007
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	Art Unit		1714
	Examiner Name		Tae H. Yoon
Sheet	4	of	4
Attorney Docket Number			1035-A4363

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
3	DA	Grant et al., "Grant and Hackh's Chemical Dictionary", 5th Ed., (1987), McGraw-Hill Book. Co. USA, ISBN 0-07-024067-1, pg. 160	
	DB		
	DC		
	DD		
	DE		
	DF		
	DG		
	DH		
	DI		
	DJ		

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